



Pomorski Uniwersytet Medyczny w Szczecinie

MODULE SYLLABUS (SUBJECT) General information

Nazwa ZAJĘĆ: Pharmacology	
Module type	<i>Obligatory</i>
PMU Faculty	<i>Faculty of Medicine</i>
Field of study	<i>Medicine</i>
Specjalność	<i>Not applicable</i>
Study level	<i>Uniform master</i>
Type of study	<i>stationary, non-stationar</i>
Year of study	IV, semester VII and VIII
ECTS	6
Forms of instruction (hours)	Seminars/classes 70 h (25 h seminars; 45 h classes) exam
Knowledge verification/grading system	<input type="checkbox"/> credit: <ul style="list-style-type: none"> <input type="checkbox"/> written, descriptive <input type="checkbox"/> test <input type="checkbox"/> practical <input type="checkbox"/> oral <input type="checkbox"/> credit, no grade <ul style="list-style-type: none"> <input checked="" type="checkbox"/> final exam: <ul style="list-style-type: none"> <input type="checkbox"/> written, descriptive <input checked="" type="checkbox"/> test <input checked="" type="checkbox"/> practical <input type="checkbox"/> oral
Head of department	Prof. dr hab. n. med. Marek Drożdżik
Responsible person	Dr hab. Ewa Dąbrowska ewa.dabrowska@pun.edu.pl 91-4661589
Address	Department of Pharmacology Powstańców Wlkp. Str. 72 70-111 Szczecin
Web page	www.farmakol.pum.edu.pl
Instruction language	Polish/English

Detailed information

Module tasks		<p>1. Detailed information about particular drug classes, drug names, actions and principles for clinical application, and drug combination in a given therapeutic indication.</p> <p>2. Discussion of drug side effects, including drug-drug interaction consequences.</p> <p>3. Drug prescription standards and practice of prescription.</p>
Prerequisite knowledge	Knowledge	Principles of biochemistry, physiology, histology, genetics
	Skills	Basic mathematical calculations, the ability to use the acquired knowledge
	Social competences	Teamwork skills

DESCRIPTION OF TEACHING EFFECTS FOR THE MODULE (SUBJECT)			
Numer of teaching effects	Student, who completed the module (subject) knows/can/is able:	SYMBOL (reference) EKK	Assessing student achievement of learning outcomes (form of verification)
W01	is able to characterize individual groups of therapeutic agents	K_C.W34	K, ET
W02	is able to explain the mechanisms of action of drugs and their changes in the system depending on age	K_C.W35	K, ET
W03	discusses the impact of disease states on drug metabolism and elimination	K_C.W36	K, ET
W04	knows the basic principles of pharmacotherapy	K_C.W37	K, ET
W05	knows the most important side effects of drugs, including drug-drug interactions	K_C.W38	K, ET
W06	understands aspects of drug resistance, including multidrug resistance	K_C.W39	K, ET
W07	knows the indications for genetic testing to individualize pharmacotherapy	K_C.W40	K, ET
U01	adjusts drug dosing to adopt medication to pathological states	K_C.U14	K, EP
U02	can correctly prescribe all forms of drug formulas	K_C.U16	K, EP
U03	uses pharmaceutical sources and databases on medicinal products	K_C.U17	K, EP
K01	possess ability to work in a group and is aware of the responsibility associated with professional career	K_K03	O

Traching effects matrix for the module (subject) referred to type of didactic forms							
Nimer of teaching effects	Teaching effects	Type of didactic activitiy					
		Lecture	Seminar	Laboratory	Clinical classes	Simulation	E-learning
W01	K_C.W34		X	X			
W02	K_C.W35		X	X			
W03	K_C.W36		X	X			
W04	K_C.W37		X	X			
W05	K_C.W38		X	X			
W06	K_C.W39		X	X			
W07	K_C.W40		X	X			
U01	K_C.U14			X			
U02	K_C.U16			X			
U03	K_C.U17			X			
K01	K_K03			X			

MODULE (SUBJECT) TEACHING CONTENT			
Symbol of teaching content	Description of teaching content	Hours	Reference to teaching effects for the module
Seminars			
TK01	Drug prescription	2	K_C.W34, K_C.W35, K_C.W36, K_C.W37, K_C.W38
TK02	Treatment of infections. Principles of antimicrobial drugs applications.	1	K_C.W34, K_C.W35, K_C.W36, K_C.W37, K_C.W38
TK03	Chemiotherapeutics. Antiseptic agents	2	K_C.W34, K_C.W35, K_C.W36, K_C.W37, K_C.W38
TK04	Antiviral drugs	1	K_C.W34, K_C.W35, K_C.W36, K_C.W37, K_C.W38
TK05	Clinical cases – approach to infections	1	K_C.W34, K_C.W35, K_C.W36, K_C.W37, K_C.W38
TK06	Hypothalamus and hypophysis hormones	1	K_C.W34, K_C.W35, K_C.W36, K_C.W37, K_C.W38, K_C.W39
TK07	Diabetes mellitus – parenteral agents	1	K_C.W34, K_C.W35, K_C.W36, K_C.W37, K_C.W38, K_C.W39, K_C.W39
TK08	Treatment of obesity and metabolic disorders	1	K_C.W34, K_C.W35, K_C.W36, K_C.W37, K_C.W38, K_C.W39

TK09	Sex hormones clinical application	1	K_C.W34, K_C.W35, K_C.W36, K_C.W37, K_C.W38, K_C.W39, K_C.40
TK10	Approach to autoimmune diseases	2	K_C.W34, K_C.W35, K_C.W36, K_C.W37, K_C.W38, K_C.W39
TK11	Pain therapy - introduction	1	K_C.W34, K_C.W35, K_C.W36 K_C.W37, K_C.W38, K_C.W40
TK12	Local anesthetics	1	K_C.W34, K_C.W35, K_C.W36, K_C.W37, K_C.W38
TK13	Myorelaxant drugs	1	K_C.W34, K_C.W35, K_C.W36, K_C.W37, K_C.W38
TK14	Cancer and neuropathic pain pharmacotherapy	1	K_C.W34, K_C.W35, K_C.W36, K_C.W37, K_C.W38, K_C.W39, K_C.W40
TK15	Hematopoiesis disorders treatment	1	K_C.W34, K_C.W35, K_C.W36, K_C.W37, K_C.W38, K_C.W40
TK16	Paptic ulcer disease treatmet	1	K_C.W34, K_C.W35, K_C.W36, K_C.W37, K_C.W38
TK17	Inflammatory bowel disease drugs	1	K_C.W35, K_C.W38, K_C.W39, K_C.W40
TK18	Cough suppressants and expectorant agents	1	K_C.W34, K_C.W35, K_C.W36, K_C.W37, K_C.W38, K_C.W39, K_C.W40
TK19	Summary – drugs for gastrointestinal tract, respiratory system and bone marrow disorders	2	K_C.W34, K_C.W35, K_C.W36 K_C.W37, K_C.W38, K_C.W39, K_C.W40
TK20	Emergency drugs	2	K_C.W34, K_C.W35, K_C.W36 K_C.W37, K_C.W38, K_C.W39, K_C.W40, K_C.U14, K_C.U17, K_K03
Practicals			
TK01	Drug prescription	3	K_C.U14, K_C.U16, K_C.U17, K_K03
TK02	Antibacterial agents, clinical application, part 1	2	K_C.U14, K_C.U16, K_C.U17, K_K03
TK03	Antibacterial agents, clinical application, part 2	2	K_C.U14, K_C.U16, K_C.U17, K_K03
TK04	Antifungal, antiparasitic drugs	2	K_C.U14, K_C.U16, K_C.U17, K_K03

TK05	Treatment of infections - summary	2	K_C.U14, K_C.U16, K_C.U17, K_K03
TK06	Thyroid and parathyroid glands pharmacology. Treatment of osteoporosis.	2	K_C.U14, K_C.U16, K_C.U17
TK07	Oral hypoglycemic agents	2	K_C.U14, K_C.U16, K_C.U17, K_K03
TK08	Hypolipemic agents	2	K_C.U14, K_C.U16, K_C.U17
TK09	Hormonal contraception. Hormonal replacement therapy.	2	K_C.U14, K_C.U16, K_C.U17
TK10	Gluco- and mineralocorticoids	2,5	K_C.U14, K_C.U16, K_C.U17
TK11	Summary – pharmacotherapy in endocrinology	2	K_C.U14, K_C.U16, K_C.U17
TK12	Opioid analgesics	2,5	K_C.U14, K_C.U16, K_C.U17, K_K03
TK13	Non-opioid analgesics	3	K_C.U14, K_C.U16, K_C.U17, K_K03
TK14	Pain management – clinical cases	2	K_C.U14, K_C.U16, K_C.U17, K_K03
TK15	Drugs affecting hemostasis	3	K_C.U14, K_C.U16, K_C.U17, K_K03
TK16	Laxatives, antidiarrheal drugs. Hepatoprotective agents.	2	K_C.U14, K_C.U16, K_C.U17, K_K03
TK17	Drugs for asthma and COPD	2	K_C.U14, K_C.U16, K_C.U17, K_K03
TK18	LEmergency drugs	2	K_C.U14, K_C.U16, K_C.U17, K_K03
TK19	Clinical cases - drugs for gastrointestinal tract, respiratory system, hemostasis and bone marrow disorders	2	K_C.U16, K_C.U17, K_K03
TK20	Revision – drug prescriptions. Exam - drug prescription.	3	K_C.U14, K_C.U16, K_C.U17, K_K03

Books
Pharmacology, 7th Edition, Lippincott Illustrated Reviews Series by Richard A. Harvey, Michelle A Clark, Richard Finkel, Jose A. Rey, Karen Whalen
Pharmacology, 5th Edition, Elsevier By George M. Brenner, Craig Stevens
Rang & Dale's Pharmacology, 9th Edition, Elsevier by James M. Ritter, Rod J. Flower, Graeme Henderson, Humphrey P. Rang

Student workload	
Form of student workload (participation in classes/seminars, activity, report writing, etc.)	Student workload [h]
	Teacher evaluation
Direct teaching	70
Classes/seminar preparation	20
Self-reading of the specified literature	15
Laboratory reports writing/project preparation	-

Section testing preparation	30
Exam preparation	40
Others	-
Summary of students workload	175
ECTS points	6
Comments	